ABSTRACT OF THE DISCLOSURE

A method consisting of the application of several novel algorithms to reduce contention and loss rates at remote (downstream) nodes Labeled Optical Burst Switched (LOBS), Optical Burst Switched (OBS), Optical Packet Switched (OPS) or other networks having buffer memory at an ingress nodes and optionally having buffer memory, FDLs or other signal delay devices at intermediate (downstream) nodes. Contention and loss are reduced by delaying locally assembled bursts beyond the pre-determined offset time using the electronic memory available at the ingress nodes, or delaying transit bursts using fiber delay lines (FDLs) even though there is no contention without using FDLs at all or a smaller delay is sufficient to avoid contention at this intermediate node. Compared to existing algorithms that address contention locally (or reactively), the proposed algorithms significantly reduce the burst loss rate.